HEARING OFFICER'S REPORT

TO: The Honorable Shawn M. Garvin
Cabinet Secretary, Department of Natural Resources and Environmental Control

FROM: Lisa A. Vest
Regulatory Specialist, Office of the Secretary
Department of Natural Resources and Environmental Control

RE: **Proposed Amendments to 7 DE Admin. Code 2103, *Regulations for the Green Energy Program* ("GEF Regulations")**

DATE: December 10, 2021

I. BACKGROUND AND PROCEDURAL HISTORY:

A virtual public hearing was held on Wednesday, July 28, 2021, at 6:00 p.m. via the State of Delaware Cisco WebEx Meeting Platform by the Department of Natural Resources and Environmental Control ("DNREC" or "Department") to receive comment on proposed regulatory amendments to 7 DE Admin. Code 2103, *Regulations for the Green Energy Program,* ("Amendments"). The Green Energy Fund ("GEF") was established by 29 *Del.C.* §8057 in 1999. The Department initially promulgated the *Regulations for the Green Energy Program* ("GEF Regulations") to govern the GEF in 2004, and then adopted revisions to those regulations in 2006.

At present, the GEF Regulations are significantly outdated, and require revisions to (1) regulate the *Green Energy Endowment Program*, the *Technology Demonstration Program*, and the *Research and Development Program*; (2) correct existing regulatory language regarding grant funding matters; (3) enable the Department to establish a low- and moderate-income solar grant program, subject to the availability of funds; and (4) strike overly detailed and prescriptive regulatory language as presently contained therein.

The proposed Amendments, if promulgated, will enable the Department, through the Division of Climate, Coastal and Energy ("CCE"), to manage the GEF more efficiently, and will provide the Department greater flexibility to efficiently operate grant programs. Specifically, the proposed substantive changes to the existing regulations are as follows:

- Section 4.0: *Green Energy Fund* – Adds existing statutory language to allow unexpended funds during a particular year to be allocated for expenditure in subsequent years.
- Section 5.0: *Green Energy Program* – Adds existing statutory language to clarify allowable expenditures under the Green Energy Program. Removes references to outdated grant incentive maximums. Adds regulatory language to allow for the removal of contractors from the Green Energy Program's Participating Contractors List. Removes Energy Efficiency Information Programs that have not been utilized since the creation of the Green Energy Program.
- Section 6.0: *Technology Demonstration Program* – Adds existing statutory language to clarify allowable expenditures under the Technology Demonstration Program. Also adds regulatory language that allows proposals to be received on a rolling basis.
- Section 7.0: *Research and Development Program* – Adds existing statutory language to clarify allowable expenditures under the Research and Development Program. Also adds regulatory language that allows proposals to be received on a rolling basis.
- Section 10.0: *Solar Energy Curriculum Program* – Adds the Solar Energy Curriculum Program that exists in the statutory language to the regulatory language.
- Section 11.0: *Other Eligible Programs* – Adds regulatory language to allow the GEF to develop new programs that are consistent with the goals of the Fund, subject to the availability of funds, as provided for under 29 *Del.C.* §8057(d).

The Department has the statutory basis and legal authority to promulgate these proposed Amendments, pursuant to 29 *Del.C.* §8057, *Green Energy Fund*. It should be noted that the CCE considered input and received technical advice from the offices of both the Delaware Public Advocate and the Public Service Commission during the development of the proposed Amendments.

The Department published the initial proposed Amendments in the July 1, 2021, *Delaware Register of Regulations*. Subsequent to the initial publication, but prior to the public hearing, the Department made several non-substantive corrections to the initial proposed Amendments. Those corrections were fully vetted and discussed by Department staff at the public hearing and were further documented in the hearing record ("Record") as Department Exhibit 7, *Summary of Edits*.

Two members of the public attended the public hearing held on July 28, 2021, and those comments will be discussed further below. Following the close of the public comment period on August 12, 2021, the CCE performed a review of the Record and prepared a Technical Response Memorandum ("TRM") in response to the comments received at the time of the public hearing. The contents of the TRM will be discussed in further detail below. It should be noted that all notification and noticing requirements concerning this matter were met by the Department. Proper notice of the hearing was provided as required by law.

II. SUMMARY OF THE PUBLIC HEARING RECORD:

The Record consists of the following documents:

(1) a verbatim transcript;

(2) eight documents introduced by Department staff at the public hearing held on July 28, 2021 and marked by this Hearing Officer at the time of the hearing accordingly as Department Exhibits 1-8; and

(3) The TRM, as provided by the Department's CCE, dated September 3, 2021.

The Department's person primarily responsible for the drafting and overall promulgation of the proposed Amendments, Brett Swan, Planner III, CCE, developed the Record with the relevant documents in the Department's files.

At the time of the public hearing held on July 28, 2021, comments were received from Jeremy M. Firestone, Ph.D., and Steven Hegedus, Ph.D. It should be noted that, while both commenters are associated professionally with the University of Delaware, the comments provided for inclusion into the Record were offered as those of private citizens, and not on behalf of any organization. Following the date of the public hearing, the Record remained open for receipt of public comment (through August 12, 2021), however, no comments other than those offered by both Dr. Firestone and Dr. Hegedus at the time of the hearing were received in this matter.

In his comments, Dr. Firestone offered criticism of the existing regulatory language, specifically, of the requirement "…to show that this 'project' is an improvement over existing products that provide a similar function." He also voiced concern regarding the costs share requirements of the GEF, specifically, that such requirements are problematic in the Social Sciences because "…we don't have industry partners. And…. don't generally want industry partners because we want our work to appear non-biased."

In his comments, Dr. Steve Hegedus advised that he believed the GEF is a "…wonderful opportunity to sponsor some exploratory and innovative research here within the State that meets the State's particular needs." He also, however, voiced concerns regarding the cost share requirements set forth in the regulations, specifically, the 65% cost share that university researchers at nonprofit organizations must contribute for a research project. Dr. Hegedus suggested that the Department insert additional regulatory language that would allow a much less cost share requirement (such as 25%) for a nonprofit research organization located within the State of Delaware.

At the request of this Hearing Officer, CCE prepared a Technical Response Memorandum ("TRM"), dated September 3, 2021. This TRM not only provides responses to the comments received at the time of the public hearing, but also sets forth additional, non-substantive revisions made to the proposed Amendments during the post-hearing phase of this regulatory promulgation. The additional revisions were made by CCE to provide further clarity to the regulatory language governing the GEF, and to provide a greater understanding to the regulatory community regarding this matter.

As a response to the comments received at the time of the hearing, the CCE's TRM indicates that the regulatory language found in subsection 7.4, *Acceptable Projects*, is mirrored after the statutory language found in 29 *Del.C.* §8057(d)(3)(a)(2), which states that the *Research and Development Program* will "…provide grants equal to no greater than 35% of the cost of project for the development of a product in Delaware directly related to Renewable Energy Technology…". Thus, the Department cannot alter the definition of "acceptable projects," as set forth in the GEF Regulations. The CCE's TRM further notes that the statutory language found in 29 *Del.C.* §8057 creates a mechanism for providing funding for Technology Demonstration and Research and Development work in Delaware, and the Department recognizes the value of supporting such work. The cost share requirements outlined in Section 6.0 for the *Technology Demonstration Program* and Section 7.0 for the *Research and Development Program* are set by 29 *Del. C.* §8057(d)(2) and (d)(3), respectively. As such, the Department cannot change the cost share percentages set forth in this regulation and must follow the statute. The Department may, however, seek to use other funding mechanisms to support such work as appropriate.

In addition to providing formal responses to the comments received at the time of the public hearing of July 28, 2021, the TRM also set forth additional revisions that were determined to be necessary as a result of the CCE's review of the Record during the post-hearing phase of this regulatory promulgation. The additional proposed changes contained in the TRM are non-substantive in nature and are being recommended by the CCE to provide further clarity and understanding to the regulated community regarding the GEF Regulations.

For the Secretary's review, the *revised* proposed Amendments and the Department's TRM of September 3, 2021, are expressly incorporated into the Record, and are attached hereto as Appendices "A" and "B," respectively.

III. RECOMMENDED FINDINGS AND CONCLUSIONS:

The Department is currently proposing the adoption of the aforementioned *revised* proposed amendments to 7 DE Admin. Code 2103, *Regulations for the Green Energy Program*. As noted previously, the GEF Regulations are outdated, and require revisions to (1) regulate the *Green Energy Endowment Program*, the *Technology Demonstration Program*, and the *Research and Development Program*; (2) correct existing regulatory language regarding grant funding matters; (3) enable the Department to establish a low- and moderate-income solar grant program, subject to the availability of funds; and (4) strike overly detailed and prescriptive regulatory language as presently contained therein.

Based on the Record developed in this matter, I find and conclude that the Department has provided appropriate reasoning regarding the need for the *revised* proposed Amendments. I further find that the proposed Amendments will enable the Department, through the CCE, to manage the GEF more efficiently, and will provide the Department greater flexibility to efficiently operate grant programs. Accordingly, I recommend promulgation of the *revised* proposed amendments to 7 DE Admin. Code 2103, *Regulations for the Green Energy Program*, in the customary manner provided by law.

Further, I recommend the Secretary adopt the following findings and conclusions:

1. The Department has the statutory basis and legal authority to act with regard to the *revised* proposed amendments to 7 DE Admin. Code 2103, *Regulations for the Green Energy Program*, pursuant to 29 *Del.C.* §8057, which authorizes the Department to adopt rules governing the State of Delaware's *Green Energy Fund*;

2. The Department has jurisdiction under its statutory authority to issue an Order adopting the *revised* proposed Amendments as final;

3. The Department provided adequate public notice of the proposed Amendments and all proceedings in a manner required by the law and regulations, and provided the public with an adequate opportunity to comment on the same subsequent to the time of the public hearing (through August 12, 2021), in order to consider all public comment on the same before making any final decision;

4. Promulgation of the *revised* proposed Amendments, as set forth in the CCE's TRM expressly incorporated herein, will enable the Department, through the CCE, to manage the GEF more efficiently. The *revised* proposed Amendments will provide the Department greater flexibility to efficiently operate its grant programs, establish a low- and moderate-income solar grant program, subject to the availability of funds, update current regulatory language, and provide greater clarity and understanding to the regulated community.

5. The Department has reviewed the *revised* proposed Amendments in the light of the Regulatory Flexibility Act, consistent with 29 *Del.C.* Ch. 104, and believes the same to be lawful, feasible, and desirable, that it will not establish reporting requirements or substantive additional costs for individuals or small businesses, and that the recommendations as proposed should be applicable to all Delaware individuals or small businesses equally;

6. The Department's *revised* proposed Amendments, as initially published in the July 1, 2021, *Delaware Register of Regulations*, and then subsequently *revised*, as set forth in Appendix "A" attached hereto, are adequately supported, are not arbitrary or capricious, and are consistent with the applicable laws and regulations. Consequently, the *revised* proposed Amendments should be approved as final Amendments, which shall go into effect ten days after publication in the next available issue of the *Delaware Register of Regulations*;

7. The Department has an adequate Record for its decision, and no further public hearing is appropriate or necessary; and

8. The Department shall submit the *revised* proposed Amendments as final Amendments to the *Delaware Register of Regulations* for publication in its next available issue, and shall provide such other notice as the law and regulation require, as the Department determines is appropriate.

/s/Lisa A. Vest
LISA A. VEST
Regulatory Specialist

\ahear\Green Energy Reg Amendments 2021

Attachments:

Appendix A: *Revised* **Pr**oposed Amendments (7 DE Admin. Code 2103)
Appendix B: TRM (09/03/21)

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

DIVISION OF CLIMATE, COASTAL AND ENERGY

Statutory Authority: 29 Delaware Code, Section 8057 (29 **Del.C.** §8057)
7 **DE Admin. Code** 2103

PROPOSED

2103 Regulations for the Green Energy ~~Program~~ Fund

1.0 Purpose

~~The purpose of this regulation is to prescribe procedures relating to the Green Energy Fund pursuant to 29 **Del.C.** Ch. 80, Subchapter 2, the Delaware Energy Act. It is the goal in establishing this regulation to provide a streamlined procedure for distributing Green Energy Funds through the use of grants and loans.~~

This regulation provides rules ~~of practice and procedure for application~~ governing applications for and disbursement of Green Energy Fund grants and loans for renewable energy projects and encouraging energy efficiency in Delaware pursuant to 29 **Del.C.** Ch. 80, Subchapter 2, the Delaware Energy Act.

2.0 Statutory Authority

These regulations are promulgated ~~under authority of~~ pursuant to 29 **Del.C.** §8051(c), §8057(b) and §8058.

3.0 Definitions

~~For purposes of this regulation, the following words and phrases shall have the meanings set forth below.~~ The following words and terms used in this regulation, have the following meaning unless the context clearly indicates otherwise.

"~~Conectiv Power Delivery~~ [DP&L" means] ~~the trade name used by Delmarva Power and Light Company.~~

"Department" means the Department of Natural Resources and Environmental Control, the ~~Delaware Energy Office~~ Division of Climate, Coastal and Energy, **[or]** such other agents as the department or Secretary may designate.

"**DP&L**" means the trade name used by Delmarva Power and Light Company, or its successor.

"**DP&L ~~Service Territory~~ service territory**" means the service territory of Delmarva Power and Light Company, or its successor, as such territory is reflected in the electric service territory maps maintained by the Delaware Public Service Commission under the authority of 26 **Del.C.** §203B

"**Energy ~~Efficiency Improvement~~ efficiency improvement**" means an increase in productivity or output for a given energy input when compared to conventional technologies or practices. Energy efficiency improvements may include equipment replacement, installation of controls, changes in operating practices, or other measures.

~~"**Energy Efficiency Information Program**" or "**Information Program**" means a program established mainly to educate or inform energy consumers about the environmental and economic benefits of energy efficiency improvements. Energy efficiency information programs may include the demonstration of new technologies or the novel application of existing technologies in order to establish their environmental and economic benefits.~~

"**Energy ~~Efficiency Technology~~ efficient technology**" means a hardware device or system that provides an end-use energy service (e.g., lighting, heating, air conditioning, motion,

etc.) using less energy per unit of output than minimum standards allow or available conventional equipment.

"**Fiscal ~~Year~~ year**" means the budget and accounting year of the State beginning on July 1 and ending on June 30. Reference to a ~~Fiscal Year~~ fiscal year by year number means the ~~Fiscal Year~~ fiscal year ending on June 30 of the named year. For example, a reference to ~~Fiscal Year~~ fiscal year 2004 means the period beginning on July 1, 2003 and ending on June 30, 2004.

~~**"Freeze Tolerance Limit"** means the temperature below which a Qualifying System for Solar Water Heating might suffer damage attributable to freezing.~~

"**Fuel ~~Cell~~ cell**" is an electrochemical energy conversion device which converts the chemical energy from a fuel directly into electricity and heat.

"**Geothermal ~~Heat Pump~~ heat pump**" means either an open or closed loop system or direct expansion system that uses the thermal energy of the ground or groundwater as the heat source and heat sink for residential or non-residential space heating ~~and/or~~ and cooling. ~~It may provide both space heating and cooling, cooling only or heating only functions.~~ A closed loop system consists of a ground heat exchanger in which the heat transfer fluid is permanently contained in a closed system. An open loop system consists of a ground heat exchanger in which the heat transfer fluid is part of a larger environment. A direct expansion system consists of a geothermal heat pump system in which the refrigerant is circulated in pipes buried in the ground, rather than using a heat transfer fluid, such as water or antifreeze solution in a separate closed loop, and fluid to refrigerant heat exchanger.

"Green Energy Fund" means the fund established by 29 **Del.C.** §8057 and administered by the Department.

"**Grid-connected**", "**Grid-tied**" or "**Interconnected**" means a condition in which a ~~Qualifying System~~ qualifying system that is an electrical generating system serves and is electrically connected to an electrical load that is also connected to and served by the local utility electrical grid. The delivery or ability to deliver, any portion of the generating capacity into the utility electrical grid is not required, nor must the loads served be only alternating current (AC) loads. Systems need only to be capable of serving electrical loads that would otherwise be served by the local utility.

"**Kilowatt**" means the basic unit of electric power equal to 1,000 ~~Watts~~ watts.

"**Kilowatt-hour**" or "**kWh**" means the basic unit of electric energy equal to one ~~Kilowatt~~ kilowatt of power supplied to or taken from an electric circuit steadily for one hour. ~~One-Kilowatt~~ One-kilowatt hour equals 1,000 ~~Watt-hours~~ watt-hours. Electric energy is commonly sold by the ~~Kilowatt-hour~~ kilowatt-hour.

"Nonresidential" means all classes of customer purchasing electric power for uses other than for individual households. These groups of customers generally purchase electric power for commercial and industrial purposes. When used as an adjective with respect to ~~Qualified Systems~~ qualified systems or Green Energy Endowment Program ~~Grants~~ grants or ~~Loans~~ loans, such term refers to systems owned by, or leased to, or grants or loans awarded to Nonresidential persons.

"Participating ~~Contractor~~ contractor" ~~is~~ means an appropriately Delaware licensed contractor who has submitted to the Department an application designated by the Department with all required attachments and maintains in full force all required insurance, certifications, and warranties as described in ~~Section 5.2~~ subsection 5.6.

"**Passive ~~Solar Design~~ solar design**" means a residential or non-residential building design that uses no external mechanical power, such as pumps or blowers, to collect and move solar heat.

"**Photovoltaic**" means an electronic semiconductor device, most commonly made of silicon that produces direct current (DC) electricity from sunlight.

"**Placed in ~~Service~~ service**" means installed, operational, and producing output.

"**Professional ~~Engineer~~ engineer**" means "engineer", as defined in Title 24 **Del.C.** Ch. 28, *Professional Engineers,* namely, a person who. by reason of his or her advanced knowledge of mathematics and the physical sciences, acquired by professional education and practical experience, is technically and legally qualified to practice Professional Engineering, and who is licensed by the Delaware Association of Professional Engineers.

"**Purchaser**" means the purchaser or lessee of a ~~Qualifying System~~ qualifying system.

~~**"Qualifying System"** has the meaning as set forth in Section 5.0.~~

"**Renewable ~~Energy Technology~~ energy technology**" shall have the meaning as prescribed in 29 **Del.C.** Ch. 80**.**

~~**"Renewable Fuel"** means a non-nuclear fuel that can be derived from non-fossil energy sources that are naturally replenishing and virtually inexhaustible.~~

"**Residential**" means the class or classes of customers purchasing electric power for household uses. ~~When used as an adjective with respect to Qualified Systems or Green Energy Program Grants, such term refers to systems owned by, or leased to, or grants awarded to Residential persons.~~

~~**"Retailer"** means the vendor or lessor of a Qualifying System.~~

"**Secretary**" means the Secretary of the Department of Natural Resources and Environmental Control.

~~**"Solar PathfinderTM"** is a non-electronic instrument that measures the annual solar potential for a given site.~~

"**Solar ~~Shade Analysis~~ shade analysis**" means ~~an on site~~ a site evaluation ~~using a Solar Pathfinder™ or functionally equivalent device~~ that measures the annual solar potential ~~for~~ at the ~~given site~~ installation address.

"**Solar ~~Water Heating~~ water heating**" means the heating of water by use of the sun's energy ~~rather than electricity or gas or some other means~~.

"**State"** means the State of Delaware.

"**Ton of ~~Capacity~~ capacity**" means 12,000 British Thermal Units (BTU) per hour of cooling capacity.

"**Watt**" means the basic unit of measure of real electric power, or rate of doing work.

"**Watt-hour**" means the basic unit of measure of electric energy consumption. The total amount of energy used in one hour by a device that requires one ~~Watt~~ watt of power for continuous operation.

"**Wind ~~Turbine~~ turbine**" means a mechanical/electrical system that converts the kinetic energy of ~~blowing~~ wind into mechanical or electric power.

4.0 Green Energy Fund

4.1 ~~The Delaware 142nd General Assembly enacted and Governor Minner signed into law Senate Bills 93 and 145, which amended Title 29 of the **Delaware Code** to include new provisions for utilizing the Green Energy Fund. The law was further amended by the Delaware 143rd General Assembly. The law continues to encourage and promote the use of renewable electric generation technologies, alternate energy technologies, and energy efficiency, by residential and non-residential (commercial) customers. Further, the law amends §8054(d) by dividing the Green Energy Fund into three separate and distinct programs.~~ The Green Energy Fund is established per Delaware Code, 29 **Del.C.** §8057.

4.2 The programs outlined in ~~§8054(d)~~ §8057(d) are described in full in this regulation and include the following:

- Green Energy Endowment ~~Program~~ Program.
- Technology Demonstration ~~Program~~ Program.
- Research and Development ~~Program~~ Program.
- Solar Energy Curriculum Program

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5.0 Green Energy Endowment Program

5.1 General Provisions

5.1.1 All grants made under the Green Energy Endowment Program are on a first-come first-served basis. ~~Allowable expenditures under the Green Energy Endowment Program shall not exceed sixty-five percent (65%) of the total revenue collected during the previous fiscal year or sixty-five percent (65%) or the total fund whichever is greater, including energy efficiency education programs. Energy efficiency education programs shall not exceed thirty percent (30%) of allowable Green Energy Endowment Program expenditures.~~

5.1.2 Under no circumstances will the Department issue grants for land acquisition in association with any project proposed in the Green Energy Endowment Program.

~~Of the total funds available through Green Energy Endowment Program on an annual basis, the grants made for residential projects shall not exceed 40% of the total funds available and the non-residential grants shall not exceed 60% of the total funds available, including energy efficiency programs.~~

~~Up to seven and one-half percent (7.5%) of the moneys deposited in the Green Energy Fund each year may be used for administration of the Fund.~~

5.2 ~~Eligibility~~ Eligibility. The Delaware Green Energy Endowment Program is available to DP&L electric customers that are contributing to the Green Energy Fund or persons in Delaware receiving services from a non-regulated electric supplier which is contributing to the Green Energy Fund. All eligible equipment and products must be installed in Delaware. ~~Energy Efficiency Programs must be implemented in Delaware for the primary benefit of DP&L customers, or persons in Delaware receiving services from a non-regulated electric supplier which is contributing to the Green Energy Fund.~~

5.3 ~~Renewable Energy Grant Reservation Request~~ Grant Application Process.

Customers and participating contractors applying for any grant for a renewable energy project must ~~provide the following information to the Department prior to installing the system:~~ submit the Green Energy Endowment Program grant application to the Department within one year of the qualifying system being placed in service. The Department may, at its discretion, extend this deadline for extenuating circumstances. The participating contractor and customer are fully responsible for ensuring that all required forms and documentation have been submitted and the system meets all program requirements and deadlines. The Department may make an inspection of the systems before authorizing grant payment. Applicants must submit the following information as part one of their application to the Department:

5.3.1 Completed ~~Grant Reservation Form~~ grant application form signed by both the customer and ~~contractor~~ the participating contractor.

5.3.2 The type of qualifying ~~system~~ system.

5.3.3 Copy of project estimate, purchase order, or letter of ~~intent~~ intent.

5.3.4 Copy of the customer's most recent ~~Conectiv Power Delivery~~ DP&L electric bill or a bill from a non-regulated electric supplier which is contributing to the Green Energy ~~Fund~~ Fund.

~~5.3.5 System schematic or line drawing~~

~~5.3.6~~ 5.3.5 Plot plan illustrating geothermal loop and well, wind turbine, or solar module ~~location (wind and geothermal only, photovoltaic when system is ground mounted)~~ location. Roof-mounted solar projects will include the following:

5.3.5.1 Location of collectors or modules on roof.

5.3.5.2 Location of any roof-mounted or building-mounted equipment.

5.3.5.3 Orientation and tilt of array or collectors.

5.3.5.4 Area of shading on property that affects system performance.

~~5.3.7 Manual J calculation (geothermal only)~~

~~5.3.8~~5.3.6 Detailed system design and a predicted performance calculation, including estimated annual kWh savings, verified by a ~~Professional Engineer. (Non-residential solar water heating systems only.)~~ professional engineer.

5.3.7 Required energy audit report

5.3.7.1 Residential applicants must submit a copy of a home performance with Energy Star audit, conducted by a building performance institute or equivalent certification program trained professional.

5.3.7.2 Commercial and residential new construction applicants must submit evidence of Energy Star Certification or an equivalent third-party green building certification.

~~5.3.9 Roof diagram illustrating the following:~~

~~5.3.9.1 Roof dimensions (angle, length and width)~~

~~5.3.9.2 Location of collectors or modules on roof~~

~~5.3.9.3 Location of any roof-mounted or building-mounted equipment~~

~~5.3.9.4 Orientation and Tilt of array or collectors~~

~~5.3.9.5 Areas of shading (Provide Solar Pathfinder results for all cases where shading occurs between 9:00 a.m. and 3:00 p.m. Results of the solar shade analysis must determine that 70% of the annual solar path's area is shade free to be considered for a grant.)~~

5.4 Evaluation of ~~Renewable Energy Grant Reservation Request~~ Grant Application

5.4.1 ~~Upon~~ On receipt of ~~the Grant Reservation Request~~ part one of the grant application and supporting documents, the Department will ~~perform an evaluation to check~~ evaluate the ~~proposal package~~ application for its compliance with the requirements ~~noted above~~ set forth in subsection **[~~5.3.1~~ 5.3]**. ~~If the proposal package is complete, the Department will process the Grant Reservation and issue a Confirmation and Claim Form to the applicant. All requirements as outlined in Section 5.3 must be provided to the Department prior to processing the grant reservation.~~

5.4.2 ~~The~~ Once part one of a residential grant application is deemed complete, the Department will reserve the funds for the project ~~described in the Grant Reservation Request~~ for six (6) months from the date ~~of~~ the ~~reservation for residential applicants and twelve (12) months from the date of reservation for non-residential applicants~~ application is deemed complete. For non-residential applications that have completed part one of the application, the Department will reserve funds twelve (12) months from the date the application is deemed complete.

5.4.3 Since all grants are reserved on a first come-first served basis, viable projects that are not completed within the required time will be placed at the end of the queue and issued an extension of six (6) months from the date of the expired reservation for residential applicants and twelve (12) months from the date of expired reservation for non-residential applicants. To be considered ~~of~~ for a reservation extension, the Department will require a project status and summary in writing fourteen (14) business days ~~prior to~~ before the expiration of the original reservation.

5.5 ~~Claim for and Distribution of~~ Green Energy **[Endowment]** Program Renewable Energy ~~Grants~~ Grant Application Part Two

5.5.1 After installation, the customer ~~and~~ or participating contractor must ~~provide~~ submit the following to the Department:

~~5.5.1~~5.5.1.1 Completed ~~Confirmation~~ confirmation and ~~Claim~~ claim form signed by both the customer and ~~contractor~~ participating contractor.

~~5.5.2~~5.5.1.2 Copy of electrical, plumbing or building ~~inspection~~ inspection.

~~5.5.3~~5.5.1.3 Copy of completed and approved DP&L Interconnection Agreement (~~photovoltaic,~~ photovoltaic and wind~~, fuel cell~~) or similar document from a non-regulated electric supplier which is contributing to the Green Energy ~~Fund~~ Fund.

~~5.5.4 Copy of product specification sheets~~

~~5.5.5~~5.5.1.4 Copy of final sales invoice (invoice must include actual price paid, itemized list of components, labor, permit fees, method of payment, and verification that the system has been paid in full.)

~~5.5.6 Copy of warranty agreement~~

5.5.1.5 Geothermal well permit including all conditions pages.

5.5.1.6 Photographs of the installed equipment.

~~5.5.7~~5.5.1.7 Copy of verification of completion of installation signed by both the customer and participating contractor.

5.5.2 ~~Upon~~ On receipt of ~~the completed Reservation Claim Form~~ part two of the grant application and all final documentation pertaining to the project as noted in ~~Section 5.5.1-5.5.6~~ subsection 5.5.1, the Department will evaluate ~~the Reservation and Claim Form~~ part two of the grant application and the required accompanying documents for consideration of grant approval. The participating contractor and customer are fully responsible for ~~insuring~~ ensuring that all forms and documentation have been supplied and the system meets all program requirements. The Department may make an inspection of the systems ~~prior to~~ before final grant approval.

5.5.3 The Department will ~~process~~ approve the grant within 30 days of receipt of ~~the Reservation and Claim Form~~ part two of the application and all supporting documentation. The Department will ordinarily process the payment to the purchaser, however, if the purchaser so requests in writing and documentation reflects the grant value was reduced directly from the purchase price, the Department will process the payment to the retailer or installing contractor.

~~Upon written request, the Department will pay the grant in two installments. Twenty-five percent 25% of the grant paid after the equipment is delivered to the installation site and all required permits, approvals, certifications from all jurisdictions having authority are secured. The remaining twenty-five percent is paid when the system is operational and approved by the utility and/or appropriate inspection agent. The Department reserves the right to review any installation prior to any partial or final grant payment.~~

5.6 Green Energy Endowment Program ~~Renewable Energy Project~~ Participating Contractor Guidelines

5.6.1 Participating Contractor ~~Application~~ Application. Contractors installing qualifying photovoltaic, solar water heating, geothermal heat pumps, or small wind turbines~~, or fuel cells~~ must complete the ~~Participating Contractor Application prior to installing systems within the~~ Department's participating contractor application before applying for a grant from the Green Energy Endowment Program. The application will consist of the following:

5.6.1.1 Name of company and key contact ~~information~~ information.

5.6.1.2 Brief history and organizational structure of ~~company~~ company.

5.6.1.3 ~~Education, experience and licensure~~ Education and experience.

5.6.1.4 General liability and statutory worker's ~~compensation~~ compensation.

5.6.1.5 Statement of reliability and good ~~standing~~ standing.

5.6.1.6 Copy of Delaware business license.

5.6.1.7 Copy of Delaware professional license.

5.6.2 Education and ~~Licensure~~ Licensure. Participating ~~Contractors~~ contractors shall maintain appropriate education and licenses to ~~insure~~ ensure that only professionally designed systems are installed within the Program. The ~~Participating Contractor~~

participating contractor must ~~be licensed in the State of Delaware~~ maintain a Delaware business license and professional license.

~~Where industry certification programs have been promulgated, grant recipients are encouraged to use industry certified contractors.~~

5.6.3 Insurance ~~Requirements~~ Requirements. The ~~Participating Contractor~~ participating contractor and anyone acting under its direction or control or on its behalf shall at its own expense procure and maintain in full force at all times Commercial General Liability Insurance with a bodily injury and property damage combined single limit of liability of at least ~~ONE MILLION DOLLARS ($1,000,000)~~ $1 million for any occurrence.

5.6.4 Statement of Reliability and Good ~~Standing~~ Standing. The ~~Contractor~~ participating contractor must be reliable and in good standing with a "Satisfactory Record" (or no negative reports) with the Better Business Bureau. The ~~Contractor~~ participating contractor shall provide a copy of their Better Business Bureau report to the Department ~~upon~~ on request. ~~Reports may be obtained at the following address.~~

~~BBB of Delaware~~
~~1415 Foulk Road, Suite 202~~
~~Foulkstone Plaza~~
~~Wilmington, DE 19803~~
~~Phone: (302)230-0108~~
~~Fax: (302)230-0116~~
~~Web Site: www.delaware.bbb.org~~
~~E-mail: info@delaware.bbb.org~~

5.6.5 Participating Contractor Removal or Suspension

5.6.5.1 The Department reserves the right to suspend or revoke any contractor's participation in the Green Energy Endowment Program participating contractor list for:

5.6.5.1.1 Poor workmanship as demonstrated through failed inspections (for example, installing severely under-performing systems; installing systems that pose serious safety issues; installing systems that have National Electric Code violations; or installing systems without following the manufacturer's specifications);

5.6.5.1.2 Receipt by the Department of a judicial determination of fraud on part of the contractor;

5.6.5.1.3 Failing to complete at least one Green Energy Endowment Program project each calendar year or;

5.6.5.1.4 Failing to provide applicants with documentation needed to complete the grant application, or failing to advise applicants of all relevant Green Energy Fund programs.

5.6.5.2 In addition to suspension or revocation of inclusion in the participating contractor list, or as a condition before reinstatement of a contractor to the list, the Department may require pending applicant complaints to be resolved to the Department's satisfaction and may require additional training or retraining for current employees.

5.6.5.3 Contractors may apply to DNREC for reinstatement to be on the list. **[Eligibility for reinstatement will be determined by the reason for initial removal from the participating contractor's list and whether the contractor has taken necessary corrective action as determined by the Department.]**

~~5.6.5~~5.6.6 Limitation of ~~Funds~~ Funds. The Program funds are limited. The ~~Participating Contractor~~ participating contractor shall follow program guidelines to ~~insure~~ ensure reservation of funds ~~prior to~~ before installing a qualifying system.

5.6.65.6.7 Owner's ~~Manual Minimum Requirements~~ Manual. Contractors are required to provide each Program participant with an owner's manual. ~~At a minimum, the owner's manual shall include the following:~~

~~5.6.6.1 Name and address of the seller~~

~~5.6.6.2 System model name or number~~

~~5.6.6.3 Identification and explanation of system components~~

~~5.6.6.4 Description of system operation~~

~~5.6.6.5 Description of system maintenance~~

~~5.6.6.6 Description of emergency procedures~~

~~5.6.6.7 Vacation procedures~~

~~5.6.6.8 Systems warranty~~

5.7 Renewable Energy Project ~~Warranty~~ Warranty. All qualifying systems receiving a Green Energy Endowment Program grant must have a full 5-year warranty against component failure, malfunction and premature output degradation. The warranty must cover all components for which the program incentive is granted and cover the full cost of repair and replacement of all components of the system. For professionally installed systems, the warranty must cover the labor to remove and replace defective components and systems.

~~5.8 Renewable Energy Project Code Compliance~~

~~All qualifying systems must be installed in accordance with the standards and specifications of the manufacturers of the components in the system, in compliance with all applicable local electric and building codes, local ordinances and these guidelines. Where discrepancies, if any, exist with these guidelines and local codes, local codes shall govern.~~

~~5.9~~5.8 Green Energy ~~Program Renewable Energy Technologies~~ Endowment Program. Renewable energy project equipment must meet the following standards ~~described in Section 5.9~~:

~~5.9.1~~5.8.1 Photovoltaic Systems

~~5.9.1.1~~5.8.1.1 Grant ~~Limits Subject to availability of funds, the~~ Limits. The Delaware Green Energy Endowment Program offers grants for grid-connected photovoltaic systems installed by qualified contractors and customers up to 50% of the total installed costs. ~~Grants will not exceed $22,500 per residential dwelling for residential systems and $250,000 per non-residential facility for non-residential systems. A photovoltaic system may not have eligible qualifying photovoltaic system costs in excess of $12 per Watt.~~ Grant maximums are set by the Department, in consultation with the Sustainable Energy Utility Oversight Board, and may be changed periodically in response to market conditions.

~~5.9.1.2~~5.8.1.2 Accepted Products and Equipment

~~5.9.1.2.1~~5.8.1.2.1 ~~Grid Interconnected~~ Grid-connected

5.8.1.2.1.1 All photovoltaic modules must be certified by a nationally recognized testing laboratory as meeting the requirements of the most recent version of Underwriters Laboratory Standard 1703.

~~All qualifying grid-connected systems must comply with the Institute of Electrical and Electronic Engineers Standards Board (IEEE) 929, Recommended Practice for Utility Interface of Photovoltaic (PV) Systems, IEEE 1547, Standard for Interconnecting Distributed Resources with the Electric Power Systems and the appropriate generation interconnection requirements of DP&L's Technical Considerations Covering Parallel Operations of Customer Owned Generation of Less than 1 Megawatt and Interconnected with the DP&L Power Delivery System or similar interconnection requirements from a non-regulated electric supplier which is contributing to the Green Energy Fund.~~

~~All inverters must be certified by a nationally recognized testing laboratory for safe operation and be certified as meeting the requirements of Underwriters Laboratory Standards 1741, Standard for Static Inverters and Charge Controllers for Use in Photovoltaic Power Systems.~~

5.8.1.2.1.2 All ~~grid~~ interconnected systems must be designed and installed to ~~comply with~~ follow the National Electric Code (NEC).

~~5.9.1.2.2 Non-Grid Interconnected or Stand-Alone~~

~~All photovoltaic modules must be certified by a nationally recognized testing laboratory as meeting the requirements of the most recent version of Underwriters Laboratory Standard 1703.~~

~~All non-grid interconnected or stand-alone systems shall be designed and installed to comply with the National Electric Code (NEC).~~

~~5.9.1.3~~5.8.1.3 Array Orientation and ~~Tilt~~ Tilt. ~~Optimum array orientation is a 180° true bearing. However, the program accepts solar arrays oriented between South of due East and South of due West or between 80° and 260° magnetic. Systems installed between 260° and 80° magnetic or North of due East and North of due West are not eligible for a Green Energy Program Grant.~~ All projects should have an orientation between 90°and 270°. The Department has the discretion to accept projects with an azimuth greater than 270° but no more than 280° and projects less **[than]** 90° but no less than 80°, if a solar shade analysis demonstrates an acceptable Total Solar Resource Fraction percentage according to subsection 5.8.1.4

~~Optimum array tilt is equal to the latitude at the installation site. However, the program accepts array tilt parameters as specified by the module manufacturer which may allow for tilts greater than and less than latitude.~~

~~5.9.1.4~~5.8.1.4 Array ~~Shading~~ Shading. ~~Photovoltaic arrays shall be installed such that the array has a minimum of six (6) hours of unobstructed sunshine daily inclusive of solar noon. A "solar window" of eight (8) hours of unobstructed sunshine is preferred.~~ The installing participating contractor is responsible for **[~~insuring~~ ensuring]** that the system is free from shading. The installing participating contractor shall perform a ~~"Solar Shade Analysis"~~ solar shade analysis to ensure the array meets the minimum daily sunshine requirements. Results of the solar shade analysis must determine that ~~70% of the annual solar path's area is shade free to be considered for a grant.~~ the solar array has a total solar resource fraction of 70% or greater. The Department may request a solar shade analysis report for any project. Any arrays that do not meet the minimum total solar resource fraction threshold will be ineligible for Green Energy Endowment Program funding.

~~5.9.1.5 Aesthetics~~

~~Aesthetics must be considered in the design and mounting of the photovoltaic array. The designing contractor must provide a roof schematic complete with roof dimensions, array placement, orientation and areas of shading to the Department prior to installation. The designing contractor must make every attempt to configure the modules in an aesthetically pleasing manner free from shading.~~

~~5.9.2~~5.8.2 Solar Water Heating

~~5.9.2.1~~5.8.2.1 Grant Limits

5.8.2.1.1 ~~Subject to availability of funds, the~~ The Delaware Green Energy Endowment Program offers grants for solar water heating systems installed by qualified contractors and customers up to 50% of the total installed cost. ~~Grants will not exceed $3,000 per residential dwelling for residential systems and $250,000 per non-residential facility for non-~~

~~residential systems.~~ Grant maximums are set by the Department, in consultation with the Sustainable Energy Utility Oversight Board, and may be changed periodically in response to market conditions.

5.8.2.1.2 Solar water heating systems integrated into a radiant heating application are eligible for a grant up to 50% of the installed cost of the solar energy portion of the system. ~~Grants will not exceed $5,000 per residential dwelling for residential systems and $250,000 per non-residential dwelling for non-residential systems.~~

~~5.9.2.2~~5.8.2.2 Accepted Products and ~~Equipment~~ Equipment. A solar water heating system must be designed to reduce or eliminate the need for electric or gas heated water.

~~All qualifying residential solar water heating systems must be certified to meet the Solar Rating and Certification Corporation's (SRCC) OG-300, Operating Guidelines and Minimum Standards for Certifying Solar Water Heating Systems: An Optional Solar Water Heating System Certification and Rating Program and have a Freeze Tolerance Limit of minus 21 degrees Fahrenheit without electrical power.~~

~~All qualifying non-residential solar water heating systems and solar energy systems integrated into a radiant heating application must utilize collectors certified to meet the Solar Rating and Certification Corporation's (SRCC) OG-100, Operating Guidelines for Certifying Solar Collectors.~~

~~Non-residential solar water heating systems will be required to submit a detailed system design and a predicted performance calculation verified by a Professional Engineer (P.E.)~~

~~5.9.2.3~~5.8.2.3 Collector ~~Orientation and Tilt~~ Orientation. ~~Optimum collector array orientation is a 180° true bearing. However, the program accepts solar collectors oriented between South of due East and South of due West or between 80° and 260° magnetic. Systems installed between 260° and 80° magnetic or North of due East and North of due West are not eligible for a Green Energy Program Grant.~~ All projects should have an orientation between 90° and 270°. The Department has the discretion to accept projects with an azimuth greater than 270° but no more than 280° and projects less than 90° but no less than 80°, if a solar shade analysis demonstrates an acceptable total solar resource fraction percentage according to subsection 5.8.2.4.

~~Optimum collector tilt is equal to the latitude at the installation site. However, the program accepts collector tilt parameters as specified by the collector manufacturer which may allow for tilts greater than and less than latitude.~~

~~5.9.2.4~~5.8.2.4 Collector ~~Shading~~ Shading. ~~All collectors shall be installed such that the collector array has a minimum of six (6) hours of unobstructed sunshine daily inclusive of solar noon. A "solar window" of eight (8) hours of unobstructed sunshine is preferred.~~ The installing participating contractor is responsible for ~~insuring~~ ensuring that the system is free from shading. The installing participating contractor shall perform a “Solar Shade Analysis” to ensure the array meets the minimum daily sunshine requirements. Results of the solar shade analysis must determine that ~~70% of the annual solar path’s area is shade free to be considered for a grant.~~ the solar array has a total solar resource fraction of 70% or greater. The Department may request a solar shade analysis report for any project. Any arrays that do not meet the minimum total solar resource fraction threshold will be ineligible for Green Energy Endowment Program funding.

~~5.9.2.5 Aesthetics~~

~~Aesthetics must be considered in the design and mounting of the solar water heating collectors. The designing contractor must complete a roof schematic~~

~~complete with roof dimensions, collector placement, orientation and areas of shading to the Department prior to installation. The designing contractor must make every attempt to configure the collectors in an aesthetically pleasing manner.~~

~~5.9.3~~5.8.3 Small Wind Turbines

~~5.9.3.1~~5.8.3.1 Grant ~~Limits Subject to availability of funds, the~~ Limits. The Delaware Green Energy Endowment Program offers incentives up to 50% of the total installed cost for small grid-connected wind turbines installed by a qualified contractor for a qualified customer. ~~Small wind turbines shall be at least 500 Watts. Grants will not exceed $22,500 per residential dwelling for residential systems and $100,000 per non-residential facility for non-residential systems. A qualifying wind turbine system shall not exceed $5.00 per Watt installed.~~ Grant maximums are set by the Department, in consultation with the Sustainable Energy Utility Oversight Board, and may be changed periodically in response to market conditions.

~~5.9.3.2~~5.8.3.2 Capacity Limits

5.8.3.2.1 Qualifying wind turbine systems ~~shall be at least~~ must be 500 ~~Watts~~ watts or larger.

5.8.3.2.2 The Department may reject applications if the location of the proposed wind turbine system has an inadequate wind resource for reasonable utilization of the equipment as recommended by the turbine manufacturer. ~~Wind resources can vary significantly; therefore, the contractor and customer must take care that the location has adequate wind for the turbine selected. It is strongly recommended that a professional evaluation of your specific site be completed.~~ The Department may require additional evidence of feasibility ~~prior to~~ before approving the grant reservation.

~~5.9.3.3~~5.8.3.3 Accepted Products and ~~Equipment~~ Equipment. Qualifying wind turbine systems must be interconnected with the electrical grid and receive approval to operate from Delmarva Power or a non-regulated electric supplier that is contributing to the Green Energy Fund.

~~5.9.3.3.1~~5.8.3.3.1 ~~Grid Interconnected~~ Grid-connected.

~~All qualifying grid-connected small wind systems must use Underwriters Laboratory listed equipment and comply with the Institute of Electrical and Electronic Engineers Standards Board (IEEE) 929, Recommended Practice for Utility Interface of Photovoltaic (PV) Systems, IEEE 1547, Standard for Interconnecting Distributed Resources with the Electric Power Systems and the appropriate generation interconnection requirements of Conectiv Power Delivery's, Technical Considerations Covering Parallel Operations of Customer Owned Generation of Less than 1 Megawatt and Interconnected with the Conectiv Power Delivery System or similar interconnection requirements from a non-regulated electric supplier which is contributing to the Green Energy Fund.~~

~~All inverters or other systems used in interconnection must be certified by a nationally recognized testing laboratory for safe operation and be certified as meeting the requirements of Underwriters Laboratory Standards 1741, Standard for Static Inverters and Charge Controllers for Use in Photovoltaic Power Systems.~~

All grid interconnected systems must be designed and installed to comply with the National Electric Code (NEC) and must pass inspection.

~~5.9.3.3.2 Non-Grid Interconnected or Stand-Alone~~

~~All qualifying non-grid interconnected wind systems must use Underwriters Laboratory certified listed equipment and systems shall be designed and installed to comply with the National Electric Code (NEC).~~

~~5.9.4~~5.8.4 Geothermal Heat Pump Systems

~~5.9.4.1~~5.8.4.1 Grant ~~Limits~~ Limits. ~~Subject to availability of funds, the~~ The Delaware Green Energy Endowment Program offers grants up to 50% of the project cost for geothermal heat pump systems installed by qualified contractors and ~~customers at the following rates:~~ customers. Grant maximums are set by the Department, in consultation with the Sustainable Energy Utility Oversight Board, and may be changed periodically in response to market conditions.

~~Residential:~~

~~$600 per ton not exceeding $3,000 per residential dwelling for residential systems installed with an Energy Efficiency Ratio (EER) of 15.0 and Coefficient of Performance (COP) of 3.4 or greater or 50% of the installed cost whichever is lower, or~~

~~$500 per ton not exceeding $2500 per residential dwelling for residential systems with an Energy Efficiency Ratio (EER) of 14.0 and Coefficient of Performance (COP) of 3.0 or greater or 50% of the installed cost whichever is lower.~~

~~Non-residential:~~

~~$600 per ton not exceeding $25,000 per non-residential facility for non-residential systems with an Energy Efficiency Ratio (EER) of 15.0 and Coefficient of Performance (COP) of 3.4 or greater or 50% of the installed cost whichever is lower, or~~

~~$500 per ton not exceeding $25,000 per non-residential facility for non-residential systems with an Energy Efficiency Ratio (EER) of 14.0 and Coefficient of Performance (COP) of 3.0 or greater or 50% of the installed cost whichever is lower.~~

~~5.9.4.2~~5.8.4.2 Accepted Products and ~~Equipment~~ Equipment.

~~Qualifying geothermal heat pump systems must be sized in accordance with good heating, ventilation and air conditioning design practices for the occupancy, location and structure. Contractor shall provide a Manual J calculation, or other equivalent calculation, to determine proper size of equipment. All~~ Participating contractors shall complete a calculation to determine the proper size of the equipment and all qualifying systems must have a warranty for protection of the integrity and performance of the system for at least five years. ~~All units installed under this program must have a minimum EER of 14.0 and COP of 3.0. Qualifying systems must meet the following:~~

~~Closed loop systems shall qualify under rating conditions in accordance with ISO 13256-1.~~

~~Open loop systems shall qualify under rating conditions in accordance with ISO 13256-1.~~

~~DX systems shall qualify under rating conditions in accordance with ARI 870.~~

~~5.9.5 Fuel Cells~~

~~5.9.5.1 Grant Limits~~

~~Subject to availability of funds, the Delaware Green Energy Program offers grants for grid-connected fuel cells installed by qualified contractors and customers up to 50% of the total installed cost for fuel cell systems operating on a renewable fuel source. Grants will not exceed $22,500 for residential systems and $250,000 for non-residential systems.~~

~~5.9.5.2 Accepted Products and Equipment~~

~~5.9.5.2.1 Grid Interconnected~~

~~All Qualifying fuel cells systems must utilize a renewable fuel source and meet the National Fire Protection Association (NFPA) 853 for Stationary Fuel Cell Power Plants, the Institute of Electrical and Electronic Engineers Standards Board (IEEE) 519-Recommended Practices and Requirements for Harmonic Control in Electric Power Systems, the most current version of the American National Standards Institute (ANSI) Z21.83 for Fuel Cell Power Plants, and input and output protection functions should be in compliance with ANSI C37.2 Device Function Number Specifications.~~

~~All grid interconnected systems must be designed and installed to comply with the National Electric Code (NEC).~~

~~5.9.5.2.2 Non-Grid Interconnected or Stand-Alone~~

~~All non-grid interconnected or stand-alone systems shall be designed and installed to comply with the National Electric Code (NEC).~~

~~5.10 Energy Efficiency Information Programs~~

~~Subject to availability of funds, the Delaware Green Energy Endowment Program offers grants for energy efficiency information programs.~~

~~Energy Efficiency Information Programs must be submitted to the Department in the form of a proposal. Proposals will be requested by the Department as needed to address specific energy education requirements, or may be submitted unsolicited. The total of all grants awarded under the Green Energy Endowment Program for Energy Efficiency Education Programs shall not exceed thirty percent (30%) of the allowable expenditures for the Green Energy Endowment Fund.~~

~~To be eligible for consideration, an Energy Efficiency Information Program must encourage energy efficiency improvements through education, information, or promotion. Proposals may target groups of consumers, using outreach, communications, technical support, or analytical resources. Energy Efficiency Information Programs may include residential or nonresidential customers.~~

~~Newly available energy efficiency technologies or novel applications of available energy efficiency technologies may be included in Energy Efficiency Information Programs to the extent necessary to demonstrate their capabilities and their environmental and economic advantages.~~

~~Energy Efficiency Information Programs must include plans to make available and broadly disseminate information to the targeted consumers. Quantifiable goals including estimated annual energy savings, numbers of people or organizations reached, and environmental impacts, must also be included. Other goals may include measurable market transformation indicators, such as penetration of new, high efficiency products into the market place.~~

~~Energy Efficiency Information Programs are not intended to provide equipment rebates or funding for technology development. The Department will not provide funding for technology development, general facility or equipment upgrades, or facility renovations.~~

5.9 The Department is authorized to develop program standards and procedures to administer the Green Energy Endowment Program.

6.0 Technology Demonstration Program

6.1 General Provisions

6.1.1 Subject to the availability of funds, the ~~Green Energy Fund's The~~ Technology Demonstration Program provides grants to projects that demonstrate the market potential for new renewable energy and energy efficiency technologies and accelerate the commercialization of these technologies in Delaware.

6.1.2 Technology Demonstration Program proposals will be accepted by the Department ~~on a biannual basis~~ subject to the availability of funds. ~~The total of all grants awarded under the Technology Demonstration shall not exceed twenty-five percent (25%) of all revenue collected for the Green Energy Fund during the previous fiscal year or 25% of the fund balance whichever is greater.~~ Grants made under the Technology Demonstration Program shall not exceed 25% of all expenditures from the Green Energy Fund on an annual basis.

6.1.3 To be eligible for consideration, a project must demonstrate a commercially available technology. Research and Development projects will not be funded under the Technology Demonstration Program. To be eligible for consideration, a project must demonstrate either a novel technology or a novel application of an available technology. ~~Projects must include a public education component, such as integration into an educational program or location at a facility that allows public tours of the installed renewable energy technology.~~

6.1.4 The Delaware Technology Demonstration Program grants are available to applicants located within the State of Delaware for projects conducted and sited in the State of Delaware.

~~Under no circumstances will the Department issue grants for land acquisition in association with any project proposed in the Technology Demonstration Program.~~

6.2 Grant Limits

6.2.1 ~~Subject to availability of funds, the Green Energy Fund's Technology Demonstration Program offers grants to projects that demonstrate the market potential of renewable energy technology in Delaware.~~ Individual grants shall not exceed ~~twenty-five percent (25%)~~ 25% of the cost of the eligible equipment for a renewable energy technology project and will not exceed $200,000 per project. ~~Grants for biodiesel manufacturing facilities shall not exceed twenty-five percent (25%) of the project cost and no one project may receive more than $300,000.~~

6.2.2 In all cases, the cost of the eligible equipment shall include only the costs of labor, overhead expenditures, equipment, materials, and subcontractors incurred during the performance of the Technology Demonstration Program contract. Expenditures made ~~prior to~~ before contract award are not eligible.

6.3 Code ~~Compliance~~ Compliance. All Technology Demonstration Program projects must be installed in accordance with the standards and specifications of the manufacturers of the components in the system and in compliance with all applicable local electric, plumbing, and building codes and local ordinances to be considered for application.

6.4 ~~Permits~~ Permits. All Technology Demonstration Program projects must obtain all relevant permits from the Delaware Department of Natural Resources and Environmental Control, other necessary state, local, regional, and federal permits to be considered for application.

6.5 Application Process

6.5.1 Technology Demonstration Program proposals will be accepted ~~on a biannual basis~~ as program funding allows. Grant applications may be solicited through a request for proposals or on a rolling basis. Applicants for the Technology Demonstration Program shall submit their proposals and supporting information in accordance with ~~Requests for Proposals issued~~ application procedures developed by the Department. Applicants must receive approval ~~prior to~~ before beginning the project.

6.5.2 ~~The~~ The Department reserves the right to reject any or all proposals ~~if the information provided is inadequate or incomplete~~.

6.6 Distribution of Technology Demonstration ~~Grants~~ Grants. The Department will process the invoices from the grant recipient in accordance with contract terms. Invoices may require supporting documentation including, but not limited to, hours worked, receipts for expenditures and a brief progress report.

6.7 ~~Accepted Products and Equipment~~ Eligible Topic Areas.

~~All Technology Demonstration Program projects interconnecting with the utility grid must comply with the Institute of Electrical and Electronic Engineers Standards Board (IEEE) 929, Recommended Practice for Utility Interface of Photovoltaic (PV) Systems and the appropriate generation interconnection arrangement of DP&L's, Technical Considerations Covering Parallel Operations of Customer Owned Generation of Less than 1 Megawatt and Interconnected with the DP&L System or a similar document from a non-regulated electric supplier.~~

~~All inverters must be certified by a nationally recognized testing laboratory for safe operation as well as be certified as meeting the requirements of Underwriters Laboratory Standards 1741-1999, Standard for Static Inverters and Charge Controllers for Use in Photovoltaic Power Systems.~~ The Department will consider applications for Technology Demonstration projects in the following topic areas:

6.7.1 Photovoltaic ~~Systems~~ Systems.

~~Photovoltaic projects located in Delaware use photovoltaic electricity to replace or substitute the need for non-renewable fuel, or include a novel or innovative use of photovoltaic design are eligible to receive a grant under the Technology Demonstration Program.~~

6.7.2 Solar ~~Thermal~~ Thermal.

~~Solar thermal projects located in Delaware that use solar thermal energy to produce electricity, replace or substitute the need for non-renewable fuel, or includes a novel or innovative use of solar thermal design is eligible to receive a grant under the Technology Demonstration Program.~~

6.7.3 Small Wind ~~Turbines~~ Turbines.

~~Small wind turbine projects located in Delaware may apply for a grant under the Technology Demonstration Program.~~

6.7.4 Fuel Cells Using Renewable Fuel.

~~Fuel cell projects located in Delaware using a renewable or non-renewable energy fuel source may apply for a grant under the Technology Demonstration Program.~~

6.7.5 Hydroelectric ~~Generators~~ Generators.

~~Hydroelectric projects located in Delaware and placed at existing dams or in free-flowing waterways may be eligible for a grant under the Technology Demonstration Program.~~

6.7.6 Storage, Conversion and Conditioning ~~Equipment~~ Equipment.

~~Storage, conversion and conditioning equipment, for use with renewable energy products that include a novel or innovative use of storage, conversion and conditioning equipment may be eligible to receive a grant under the Technology Demonstration Program.~~

6.7.7 Passive Solar ~~Design~~ Design.

~~Passive solar designs that implement novel or innovative passive solar products may be eligible to receive a grant under the Technology Demonstration Program. Grants for passive solar projects shall not exceed 25% of the installed cost of the project up to a maximum of $3000 per residential dwelling for residential projects and $20,000 per non-residential facility for non-residential projects.~~

~~The project shall meet the requirements in Section 6.1 and provide a cost-effectiveness analysis and a Manual J calculation or equivalent that demonstrates the estimated energy impact expected over the industry standards that provide a similar function.~~

6.7.8 Biodiesel Manufacturing ~~Facilities~~ Facilities.

~~Biodiesel manufacturing facilities located in Delaware may apply for a grant under the Technology Demonstration Program.~~

6.7.9 Energy Efficiency Technologies, Processes and ~~Practices~~ Practices.

~~New energy efficiency technologies are eligible for grants under the Technology Demonstration Program. To be eligible for funding, the applicant must demonstrate that a measurable improvement in energy efficiency can be achieved in comparison to conventional technologies, processes and practices, and that the proposed equipment or approach is not widely available or in use.~~

6.7.10 Microgrids and Control Technologies Utilizing Renewable Energy.

6.7.11 Other Renewable Energy Technologies.

6.8 The Department is authorized to develop program standards and procedures to administer the Technology Demonstration Program.

7.0 Research and Development Program

7.1 General Provisions

7.1.1 Subject to availability of funds, the Green Energy Fund's Research and Development Program offers grants to projects that develop or improve Renewable Energy Technology in Delaware. The Department will accept proposals for Research and Development Program grants for qualifying projects that improve the engineering, adaptation, or development of products or processes that directly relate to renewable energy technology.

7.1.2 **~~[Research and Development Program proposals will be accepted by the Department on a biannual basis subject to the availability of funds.]~~** ~~The total of all grants awarded in any one fiscal year shall not exceed ten percent (10%) of all revenue collected for the Green Energy Fund during the previous fiscal year or 10% of the fund balance whichever is greater.~~ Grants made under the Research and Development Program, in the aggregate, shall not exceed 10% of all expenditures from the Green Energy Fund on an annual basis.

~~[7.1.3]~~ **~~[Subject to the future availability of funds, the Department will consider multi-year projects in the Research and Development Program. Proposals seeking grants for multi-year projects shall not exceed fifty percent (50%) 50% of the total annual funds available in the Research and Development Program.]~~**

[~~7.1.4~~ 7.1.3] The Delaware Research and Development Program grants are available to applicants located within the State of Delaware for projects conducted in the State of Delaware. Under no circumstances will the Department issue grants for land acquisition in association with any project proposed in the Research and Development Program.

7.2 Grant Limits

7.2.1 Subject to availability of funds, the Research and Development Program offers grants up to ~~thirty-five percent (35%)~~ 35% of the cost of qualifying projects. Research and Development Program grants shall not exceed $250,000 per project. Cost of qualifying projects shall include only the costs of labor, overhead expenditures, equipment, materials, and subcontractors incurred during the performance of the contract. Expenditures made ~~prior to~~ before contract award are not eligible.

7.2.2 **[~~Subject to the future availability of funds, the~~ The**] Department will consider multi-year projects in the Research and Development Program. Proposals seeking grants for multi-year projects shall not exceed fifty percent ~~(50%)~~ 50% of the total annual funds available in the Research and Development Program.

7.3 Application Process

7.3.1 The following describes the general approach envisioned for these projects. Alternative approaches to achieve the desired results may be considered, provided that the work scope is complete, addresses all of the technical issues, and has a convincing chance for success.

7.3.2 Applicants are to propose projects and tasks that address all issues described in ~~Section~~ subsection 7.1 with care taken to emphasize the unique application advantages and environmental benefits that will result from the proposed project. The proposal should clearly define why this project is an improvement over existing products that provide a similar function.

7.3.3 ~~———~~Research and Development Program proposals ~~will be accepted on a biannual~~ may be solicited through a request for proposal or on a rolling basis. ~~Applicants for the Research and Development Program shall submit their proposals and supporting information in accordance with Requests for Proposals issued by the Department.~~ Applicants must receive approval ~~prior to~~ before beginning the project.

7.3.4 Applications will be reviewed by ~~a committee established by~~ the Department. The Department will determine the eligibility for a grant ~~and will, in particular, the eligible costs in 7.2~~. A statement of reservation of funds and authorization to proceed will be issued by the Department ~~upon~~ on completion and acceptance of contract terms.

7.4 Acceptable Projects

7.4.1 The Department will accept proposals for Research and Development Program grants for qualifying projects that improve the engineering adaptation, or development of products that directly relate to renewable energy and energy efficiency technologies. The Department reserves the right to reject any or all proposals if the information provided is inadequate or incomplete.

7.4.2 Applicants are to propose projects and tasks that address all issues described in ~~Section~~ subsection 7.1 with care taken to emphasize the unique application advantages and environmental benefits that will result from the proposed project. The proposal should clearly define why this project is an improvement over existing products that provide a similar function.

7.5 The Department is authorized to develop program standards and procedures to administer the Research and Development Program.

8.0 Evaluation of Technology Demonstration and Research and Development Applications

8.1 ~~Compliance Review~~ Proposal Evaluation

8.1.1 Proposals submitted under the Technology Demonstration and Research and Development Programs will receive a thorough ~~compliance review~~ evaluation by the Department. ~~A compliance review~~ An evaluation will be performed to check the proposal package for its compliance with the requirements ~~of the Department's Requests for Proposals and the requirements~~ outlined in Sections ~~6 and 7~~ 6.0 and 7.0. ~~The Department will determine the eligibility for a grant and will, in particular, consider the education requirements in 6.1 and the eligible costs in 6.2 and 7.2.~~

8.1.2 The Department reserves the right to ~~void~~ reject an application if the information requested is not received within the prescribed timeframe when requested or is inadequate or incomplete.

~~A statement of reservation of funds and authorization to proceed will be issued by the Department upon completion and acceptance of contract terms.~~

8.2 Evaluation ~~Committee~~ Process. ~~All applications that fulfill the minimum application requirements, as determined under the compliance review, will be eligible for comprehensive evaluation.~~ The comprehensive evaluation of proposals will be performed by the Department, which at its discretion may form an evaluation committee. ~~and a committee designated by the Department. In evaluating applications, the Department reserves the right to use any assistance deemed advisable, including qualified personnel from federal agencies, other government entities, universities, industry, and contractors. The Department will make every effort to use unbiased individuals and experts on the review committee. These individuals will be required to protect the confidentiality of any specifically identified trade secrets and/or~~

~~privileged or confidential commercial or financial information obtained as a result of their participation in this evaluation.~~

~~The reviewers and their employers, employees, affiliates, and members shall excuse themselves from proposing projects under the Research and Development or Technology Demonstration Programs for the funding period during which they are serving on the reviewing committee.~~

8.3 ~~Notification~~ Notification. All applicants will be notified in writing of the action taken on their applications. ~~Applicants should allow at least 90 days for the Department evaluation. The status of any application during the evaluation and selection process will not be discussed with the applicant or any of its partners. Unsuccessful application will receive a letter summarizing the committee's decision. Unsuccessful applications will not be returned to applicants.~~

8.4 Grant Award

8.4.1 **~~[If upon]~~** If, on completion of the Comprehensive Evaluation, the review committee finds that the proposed project fits the criteria of the Technology Demonstration or Research and Development Programs, then a statement of reservation of funds and authorization to proceed will be issued by the Department.

8.4.2 All recipients of grants may be required to ~~participate in mandatory evaluation meetings on a periodic basis~~ submit general reporting on a periodic basis. ~~During each evaluation meeting, the results to date and future plans for the project will be presented by the Recipient to an evaluation panel selected by the Department. The results of each evaluation may be used by the Department to determine whether the project will continue to receive funding. Applicants should assume that at least two meetings per year will be required for evaluation and that up to two additional review meetings may be held at the applicant's location.~~

~~8.5 Payment for Work Performed~~

~~The Department will process the invoices from the grant recipient usually within 30 days of receipt of invoice and supporting documentation. Supporting documentation shall include but not limited to hours worked, receipts for expenditures and a brief progress report. Additional documentation and reporting requirements may be necessary depending on the nature and duration of the work performed.~~

9.0 Proprietary Application Information

9.1 Applicants are hereby notified that the Department intends to make all applications submitted available to non-State personnel for the sole purpose of assisting in its evaluation of the applications. These individuals will be required to protect the confidentiality of any specifically identified proprietary information obtained as a result of their participation in the evaluation.

9.2 Proposals submitted may contain trade secrets ~~and/or~~ and privileged or confidential commercial or financial information which the applicant does not want to be used or ~~disclosed~~ shown for any purpose other than evaluation of the application. The use and disclosure of such data may be restricted, provided the applicant follows the Department's "Request for Confidentiality" procedure contained in the Department's "Freedom of Information Act" or "FOIA" regulation. It is important to understand that this FOIA regulation's confidentiality procedure is a necessary part of this regulation in that any information submitted to the Department is subject to public review unless deemed to be confidential by the Secretary in accordance with the criteria and procedures established in the FOIA regulation.

9.3 The burden lies with the applicant asserting the claim of confidentiality to meet the criteria established in the FOIA regulation.

10.0 Solar Energy Curriculum Program

10.1 Subject to the availability of funds, the Solar Energy Curriculum Program shall provide cash grants from the Green Energy Fund to high schools in Delaware that are DP&L customers and that create a course, or curriculum, that teaches the science, economics, policy, and hands-on installation of solar photovoltaic technology.

10.2 Grants made under this program provide up to 100% of funding for the installation of a solar photovoltaic system to be used as part of the qualifying school's solar energy curriculum.

10.3 Total funding may not exceed $10,000 per school for solar equipment only and shall not prevent the school from participating in the Green Energy Endowment Program. Green Energy Fund dollars committed to such installations shall not exceed $100,000 per year.

10.4 The Department is authorized to develop program standards and procedures to administer the Solar Energy Curriculum Program.

11.0 Other Eligible Programs

11.1 Subject to the availability of funds, additional programs may be developed that are consistent with the goals of the Green Energy Fund as described in 29 **Del.C.** §8057(c). Those additional programs may include, but are not limited to:

- Programs establishing and supporting renewable energy and energy efficiency education and public awareness.
- Programs supporting the construction, maintenance and operation of green buildings, schools, and residential developments.
- Programs pursuing community outreach on clean energy technologies.
- Programs supporting the development of green industries and generators in the State.
- Programs supporting low- to moderate-income solar access.

11.2 The Department is authorized to develop program standards and procedures to administer any program developed under this section that is consistent with the goals of the Green Energy Fund.

~~10.0~~12.0 Severability

If any section, subsection, paragraph, sentence, phrase or word of these regulations is declared unconstitutional by a court of competent jurisdiction, the remainder of these regulations shall remain unimpaired and shall continue in full force and effect, and proceedings there under shall not be affected.

8 DE Reg. 114 (07/01/04)
9 DE Reg. 1566 (04/01/06)
25 DE Reg. 63 (07/01/21) (Prop.)

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
DIVISION OF CLIMATE, COASTAL AND ENERGY
STATE STREET COMMONS
100 W. WATER STREET, SUITE 10B
DOVER, DELAWARE 19904

ENERGY POLICY & PROGRAMS

PHONE
(302) 735-3480

Memorandum

TO: Lisa Vest, Hearing Officer

THROUGH: Dayna Cobb, Director
Dayna M. Cobb Digitally signed by Dayna M. Cobb Date: 2021.09.07 12:29:21 -04'00'

FROM: Brett Swan, Planner III
Brett Swan Digitally signed by Brett Swan Date: 2021.09.07 12:04:15 -04'00'

DATE: September 3, 2021

SUBJECT: Department's response to comments received on the proposed amendments to 7 DE Admin. Code 2103 "Regulations for the Green Energy Program"

You presided over a virtual public hearing on Wednesday, July 28, 2021 beginning at 6:00pm. The subject of the public hearing was the proposed amendments to 7 DE Admin. Code 2103 "Regulations for the Green Energy Program."

At the hearing, the Department received comments from the following:

Name	Affiliation
Dr. Jeremy Firestone	Private Citizen
Dr. Steve Hegedus	Private Citizen

Both commenters gave verbal testimony at the hearing, which is included in the verbatim transcript.[1] No written comments were submitted after the hearing.

This memorandum provides the comments received and the responses of the Division of Climate, Coastal and Energy on behalf of the Department.

[1] Hearing Transcript, "Proposed Amendments to 7 DE Admin. Code 2103 "Regulations for the Green Energy Program," Lexitas Reporting, www.lexitaslegal.com, available at https://dnrec.alpha.delaware.gov/events/public-hearing-delaware-green-energy-fund-regulations/. Comments by Dr. Jeremy Firestone can be found on pages 21 through 24. Comments by Dr. Steve Hegedus can be found on pages 24 through 27.

Comment 1:

Dr. Jeremy Firestone's comment stated: "I'm a Professor at the University of Delaware in the School of Marine Science and Policy, and the Director of the University Center for Research in Wind. I'm a Social Science Scientist and Lawyer by training. DNREC's mission includes to lead energy policy and climate preparedness. The Social Sciences are critical and, indeed, have been addressing the climate crisis moving swiftly. And a just energy transition has to be rooted in the Social Sciences. Indeed, while much of the focus has placed both its current energy and, here on this regulation, on building a better bread box that is technology. The impediments to the energy transition are more social and cultural than they are technological or economic. I went through the rules a little bit ago because I had the markup. But the only mention of the words economics or policy in the Regulations are with regard to the new solar energy curriculum program. The word technologies or technology appears 34 times, products nine times, and engineer, engineers, or engineering eight. None of the words social culture, cultural justice or equity appear at all in the Rule. Now, there is arguably a way through Rule 7.41 and 7.11 that Social Science projects could be seen as improving the adaptation of "products." But please let us bring Social Science research through the front door. But even then, given the existing language, there are difficulties that remain in 7.4.2 because we're required to show that this "project" is an improvement over existing products that provide a similar function. Now, the last time there was a competition, we did have the same issue, and we got DNREC to agree that the Rules were broad enough to allow Social Science. But let's do it up front and make it clear that we can bring Social Science to bear on these issues. The last thing, and I know Professor Hegedus is going to talk a good deal on this, is the cost share requirements, which are a particular difficult problem in the Social Sciences because we don't have industry partners. And, indeed, we don't generally want industry partners because we want our work to appear non-biased."

Department Response:

The language in subsection 7.4 Acceptable Projects is mirrored after the statutory language in Title 29 Del. C. Ch. 80, §8057 (d)(3)(a)(2), which states that the Research and Development Program will "provide grants equal to no greater than 35% of the cost of project for the development of a product in Delaware directly related to Renewable Energy Technology, including but not limited to any product improving the engineering of, adapting or developing Renewable Energy Technology either as an independent piece of Renewable Energy Technology or as a component thereof." Therefore, the Department cannot alter the definition of acceptable projects or the cost share percentages in this regulation. Whether a specific proposal fits the requirements would have to be determined upon submission of a grant application.

Comment 2:

Dr. Steve Hegedus' comment stated: "I have been doing solar energy research at the University of Delaware for almost 40 years at the Institute of Energy Conversion and within the College of Engineering. I think that this Green Energy Fund is a wonderful opportunity to sponsor some exploratory and innovative research here within the State that meets the State's particular needs. I would particularly like to address Section 7.2. I understand that you need the recipient to demonstrate that they have some skin in the game by providing some cost share. Typically, with Department of Energy Programs, this cost share is 20 percent. And you are requiring us to come up with 65 percent for research. I understand having a high level of cost share for the technology development, Section 6, because that's being done by companies. They're probably

expecting to develop a profitable product. And companies have a lot more resources available to meet the cost share requirements. However, university researchers at nonprofit organizations it's pretty tough to come up with 65 percent cost share for a research project. We have very limited ways that we can adjust or provide free service for labor or equipment. So, what I would be asking is that you would reconsider that adding a sentence that would make the recipient cost share requirement, for example, let's say 25 percent for a nonprofit research organization located within the State. So, that would include colleges, universities, and I don't know what else. But 25 percent cost share is still more than the Department of Energy or the National Science Foundation requires. It would demonstrate considerable commitments from the recipient, but it wouldn't be as difficult or challenging to meet. And, therefore, I think you would get more and higher quality proposals. Thank you very much."

Department Response:

The statute creates a mechanism for providing funding for Technology Demonstration and Research and Development work in Delaware, and the Department recognizes the value of supporting such work. The cost share requirements outlined in section 6.0 for the Technology Demonstration Program and section 7.0 for the Research and Development Program are set by 29 Del. C. Ch. 80, §8057 (d)(2) and (d)(3) respectively. As such, the Department cannot change the cost share percentage in this regulation and must follow the statute. The Department may seek to use other funding mechanisms to support such work as appropriate.

Additional Non-Substantive Edits Recommended by the Department:

The Department recommends the following edits to be made to the proposed amendments:

1. In Section 3.0, the following definition reads: "~~**Conectiv Power Delivery**~~ **DP&L**" means ~~the trade name used by Delmarva Power and Light Company.~~
    a. The Department recommends striking this definition in its entirety, not partially. DP&L is already defined in this section.

2. In Section 3.0, the following definition reads: "**Department**" means the Department of Natural Resources and Environmental Control, the ~~Delaware Energy Office~~ Division of Climate, Coastal and Energy, such other agents as the department or Secretary may designate
    a. The Department recommends including the word "or" so that the definition reads: "**Department**" means the Department of Natural Resources and Environmental Control, the ~~Delaware Energy Office~~ Division of Climate, Coastal and Energy, **[or]** such other agents as the department or Secretary may designate.

3. Subsection 5.4.1 reads: ~~Upon~~ On receipt of ~~the Grant Reservation Request~~ part one of the grant application and supporting documents, the Department will ~~perform an evaluation to check~~ evaluate the ~~proposal package~~ application for its compliance with the requirements ~~noted above~~ set forth in subsection 5.3.1. ~~If the proposal package is complete, the Department will process the Grant Reservation and issue a Confirmation and Claim Form to the applicant. All requirements as outlined in Section 5.3 must be provided to the Department prior to processing the grant reservation.~~
    a. Subsection 5.3.1 is the incorrect subsection to reference. Therefore, the Department recommends editing this subsection to read: ~~Upon~~ On receipt of ~~the~~

~~Grant Reservation Request~~ part one of the grant application and supporting documents, the Department will ~~perform an evaluation to check~~ evaluate the ~~proposal package~~ application for its compliance with the requirements ~~noted above~~ set forth in subsection **[~~5.3.1~~ 5.3]**. ~~If the proposal package is complete, the Department will process the Grant Reservation and issue a Confirmation and Claim Form to the applicant. All requirements as outlined in Section 5.3 must be provided to the Department prior to processing the grant reservation.~~

4. Subsection 5.5 reads: ~~Claim for and Distribution of~~ Green Energy Program Renewable Energy ~~Grants~~ Grant Application Part Two.
    a. To maintain consistency with the rest of the proposed amendments to this regulation, the Department recommends editing this subsection to read: ~~Claim for and Distribution of~~ Green Energy **[Endowment]** Program Renewable Energy ~~Grants~~ Grant Application Part Two.

5. Subsection 5.6.5.3 reads: Contractors may apply to DNREC for reinstatement to be on the list.
    a. The Department recommends inserting the following sentence at the end of this subsection for the purpose of clarity: **[Eligibility for reinstatement will be determined by the reason for initial removal from the participating contractor's list and whether the contractor has taken necessary corrective action as determined by the Department.]**

6. Subsection 5.8.1.3 reads: All projects should have an orientation between 90°and 270°. The Department has the discretion to accept projects with an azimuth greater than 270° but no more than 280° and projects less 90° but no less than 80°, if a solar shade analysis demonstrates an acceptable Total Solar Resource Fraction percentage according to section 5.8.1.4.
    a. The Department recommends inserting the word "than" as follows: All projects should have an orientation between 90°and 270°. The Department has the discretion to accept projects with an azimuth greater than 270° but no more than 280° and projects less **[than]** 90° but no less than 80°, if a solar shade analysis demonstrates an acceptable Total Solar Resource Fraction percentage according to section 5.8.1.4.

7. Subsection 5.8.1.4 reads: Array ~~Shading~~ Shading. ~~Photovoltaic arrays shall be installed such that the array has a minimum of six (6) hours of unobstructed sunshine daily inclusive of solar noon. A "solar window" of eight (8) hours of unobstructed sunshine is preferred.~~ The installing participating contractor is responsible for ensuring that the system is free from shading.
    a. For grammatical accuracy, the Department recommends the following edit: Array ~~Shading~~ Shading. ~~Photovoltaic arrays shall be installed such that the array has a minimum of six (6) hours of unobstructed sunshine daily inclusive of solar noon. A "solar window" of eight (8) hours of unobstructed sunshine is preferred.~~ The installing participating contractor is responsible for **[~~insuring~~ ensuring]** that the system is free from shading.

8. Subsection 7.1.2 reads: Research and Development Program proposals will be accepted by the Department ~~on a biannual basis~~ subject to the availability of funds. ~~The total of all grants awarded in any one fiscal year shall not exceed ten percent (10%) of all revenue collected for the Green Energy Fund during the previous fiscal year or 10% of the fund balance whichever is greater.~~ Grants made under the Research and Development Program, in the aggregate, shall not exceed 10% of all expenditures from the Green Energy Fund on an annual basis.
    a. To avoid the repetitious use of the phrase "subject to the availability of funds," the Department recommends the following edit to this subsection: **~~[Research and Development Program proposals will be accepted by the Department on a biannual basis subject to the availability of funds.]~~** ~~The total of all grants awarded in any one fiscal year shall not exceed ten percent (10%) of all revenue collected for the Green Energy Fund during the previous fiscal year or 10% of the fund balance whichever is greater.~~ Grants made under the Research and Development Program, in the aggregate, shall not exceed 10% of all expenditures from the Green Energy Fund on an annual basis.

9. Subsections 7.1.3 and 7.2.2 are the exact same paragraph.
    a. To eliminate unnecessary repetition, the Department recommends striking subsection 7.1.3 in its entirety as shown here: **~~[Subject to the future availability of funds, the Department will consider multi-year projects in the Research and Development Program. Proposals seeking grants for multi-year projects shall not exceed fifty percent (50%) 50% of the total annual funds available in the Research and Development Program.]~~**

10. Since subsection 7.1.3 is being stricken, subsection 7.1.4 as written in the current proposed regulations must be renumbered to 7.1.3.
    a. The Department recommends the following edit: **[~~7.1.4~~ 7.1.3]**

11. Subsections 7.2.1 and 7.2.2 both begin with "Subject to the availability of funds."
    a. To eliminate unnecessary repetition, the Department recommends the following edit to subsection 7.2.2: **[~~Subject to the future availability of funds, the~~ The]** Department will consider multi-year projects in the Research and Development Program. Proposals seeking grants for multi-year projects shall not exceed ~~fifty percent (50%)~~ 50% of the total annual funds available in the Research and Development Program.

12. Subsection 8.4.1 reads: If upon If, on completion of the Comprehensive Evaluation, the review committee finds that the proposed project fits the criteria of the Technology Demonstration or Research and Development Programs, then a statement of reservation of funds and authorization to proceed will be issued by the Department.
    a. For grammatical accuracy, the Department recommends the following edit to this subsection: **[~~If upon~~]** If, on completion of the Comprehensive Evaluation, the review committee finds that the proposed project fits the criteria of the Technology Demonstration or Research and Development Programs, then a

statement of reservation of funds and authorization to proceed will be issued by the Department.